

Cisco Nexus 7000 I/O Module Comparison Matrix

	N7K-M140GS-11	N7K-M140GS-11L	N7K-M140G-1-11	N7K-M140G-T-11L	N7K-M1032P-2L	N7K-M132XP-12L	N7K-M132XP-12L	N7K-M224XP-23L	N7K-M224XP-23L	N7K-M208QP-23L	N7K-M202CF-23L	N7K-F132XP-15	N7K-F240XP-25	N7K-F240XP-25E	N7K-F240XT-25E	N7-F248XP-23E	N7K-F240XP-25	N7K-F312PQ-25	N7K-F300CK-25	N7-F248XP-23	N7-F324FQ-25	N7-F312CK-25	N7K-M340XP-23L	N7K-M324FQ-23L	N7-M340XP-23L	N7-M324FQ-23L	N7-M312CO-23L	N7-M300CO-35	General	
General	ANKARA 4.1	BOZGA 5.0D	ANKARA 4.0	CARD 3.5D	BOZGA 5.0	ANKARA 4.0	CARD 3.5D	Edinburgh-2 6.1(1)	Edinburgh-2 6.1(1)	Edinburgh-2 6.1(1)	CARD 3.5D	CARD 3.5D	Edinburgh-2 6.1(1)	Edinburgh-2 6.1(1)	Edinburgh-2 6.1(1)	Frederic 6.2(1)	Frederic MR2 6.2(1)	Frederic MR2 6.2(1)	Frederic MR2 6.2(1)	Frederic MR2 6.2(1)	Frederic MR2 6.2(1)	Frederic MR2 6.2(1)	Abenton 6.0(1)	Abenton 6.0(1)	Heald 6.0(1)	Heald 6.0(1)	Capitol 6.3(1)	General		
Min. NX-OS Release	4.1(2)	5.0(2)	4.0(1)	3.5(2)	5.0(2)	4.0(1)	3.5(2)	6.1(1)	6.1(1)	6.1(1)	3.5(1)	3.5(1)	6.1(2)	6.1(2)	6.1(2)	6.2(2)	6.2(2)	6.2(2)	6.2(2)	6.2(2)	6.2(2)	6.0(1)	6.0(1)	7.3(3)(7)(1)	7.3(3)(7)(1)	6.0(1)	6.3(1)	Min. NX-OS Release		
LC Interoperability (same VDC)	M1P1M2 M1M2F2E	M1P1M2 M1M2F2E	M1P1M2 M1M2F2E	M1P1M2 M1M2F2E	M1P1M2 M1M2F2E	M1P1M2 M1M2F2E	M1P1M2 M1M2F2E	M1P1M2 M1M2F2E	M1P1M2 M1M2F2E	M1P1M2 M1M2F2E	M1P1M2 M1M2F2E	M1P1M2 M1M2F2E	F3P1F3	F3P1F3	F3P1F3	F3P1F3	F3P1F3	F3P1F3	F3P1F3	F3P1F3	F3P1F3	F3P1F3	F3M0	F3M0	F3M0	F3M0	F3M0	F3M0	LC Interoperability (same VDC)	
Fabric Module 1 Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Fabric Module 1 Support	
Fabric Module 2 Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Fabric Module 2 Support	
SUP 1 Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SUP 1 Support	
SUP 2/2E Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SUP 2/2E Support	
7000 / 7010 / 7015 Chassis Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7000 / 7010 / 7015 Chassis Support	
7702 / 7706 / 7710 / 7718 Chassis Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7702 / 7706 / 7710 / 7718 Chassis Support	
Hardware Features	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Yes	NA	NA	NA	Yes	Yes	Yes	NA	NA	NA	NA	NA	NA	Hardware Features	
Ports and Qty	48x10	48x10	48x10/100/1000	48x10/100/1000	8xSFP	32x10G(4x1) 8x40G(1)	32x10G(4x1) 8x40G(1)	24x10G	8x40G	2x10G	32x10G	48x10G	48x10G	48x10G	48x10G	48x10G	48x10G	12x40G	8x10G	48x10G	24x40G	24x40G	48x10G	24x40G	48x10G	24x40G	12x10G	32x10G	Ports and Qty	
Interface Type	SFP	SFP	RJ-45	RJ-45	10 SFP+ 20 SFP+ 20x40G	SFP+	SFP+	SFP+	QSFP+	CFP	SFP	SFP	SFP	SFP	SFP	QSFP+	CFP	SFP	SFP	QSFP+	CFP	SFP	SFP	QSFP+	SFP	QSFP+	QSFP+	QSFP+	Interface Type	
Min. Fabric Requirements (for full bandwidth)	1x F40E 1x F40E	1x F40E 1x F40E	1x F40E 1x F40E	1x F40E 1x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	2x F40E 2x F40E	Min. Fabric Requirements (for max. throughput)
VoD to Fabric Bandwidth	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	250 Gbps	VoD to Fabric Bandwidth	
Fabric Interface	E40E	E40E	E40E	E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	2x E40E	Fabric Interface	
Forwarding Engine	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	6x6x6	Forwarding Engine	
Performance (IPV4)	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	40 Mpps	Performance (IPV4)	
Performance (IPv6)	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	30 Mpps	Performance (IPv6)	
Module Memory (GB)	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	Module Memory (GB)	
Typical Power Draw (W)	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	338 W	Typical Power Draw (W)	
Max PowerDraw (W)	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	400 W	Max PowerDraw (W)	
Port-to-port latency	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	80ns	Port-to-port latency	
Card-to-card latency	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	150ns	Card-to-card latency	
MAC Entries	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	MAC Entries	
IPv4 Unicast Routes	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	IPv4 Unicast Routes	
IPv4 Multicast Routes	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	128K	IPv4 Multicast Routes	
IPv6 Unicast Routes	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	64K	IPv6 Unicast Routes	
IPv6 Multicast Routes	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	16K	IPv6 Multicast Routes	
Adacency Table	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	1M	Adacency Table	
IPv4 ARP Entries	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	IPv4 ARP Entries	
IPv6 ND Entries	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	Part of FIB/ACL	IPv6 ND Entries
NetFlow	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	Full / Sampled	NetFlow	
NetFlow Entries	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	NetFlow Entries	
ACL Entries	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	512K	ACL Entries	
Queue Structures	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Ingress: 2q8 Egress: 1q24E	Queue Structures		
Buffer Size per Port (ingress)	7.2MB	7.2MB	7.2MB	7.2MB	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	9.6M	Buffer Size per Port (ingress)	
Buffer Size per Port (egress)	6.1MB	6.1MB	6.1MB	6.1MB	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	8.0M	Buffer Size per Port (egress)	
VoD Buffer Per Card	32MB	32MB	32MB	32MB																										

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	N7K-M140GS-11	N7K-M140GS-11L	N7K-M140G-111	N7K-M140G-11L	N7K-M1032Q-2L	N7K-M132XP-12	N7K-M132XP-12L	N7K-M224XP-23L	N7K-M224XP-23L	N7K-M202CF-22L	N7K-F132XP-15	N7K-F240XP-25	N7K-F240XP-25E	N7K-F240XP-25E	N7K-F248XP-23E	N7K-F340XP-25	N7K-F312PQ-25	N7K-F300CK-25	N7K-F348XP-23	N7K-F324FQ-25	N7K-F312CQ-25	N7K-M340XP-23L	N7K-M324FQ-25L	N7K-M340XP-23L	N7K-M324FQ-25L	N7K-M312CQ-25L	N7K-F430CQ-35	
FEK Features	FEK Features																											
FEK Support	FEK Support																											
FEK Support - Min supported version	FEK Support - Min supported version																											
FEK Model Supported	FEK Model Supported																											
FEK Straight Through (root-channel mode only)	FEK Straight Through (root-channel mode only)																											
FEK Active/Active to 2 Parents NTK L2-Egress	FEK Active/Active to 2 Parents NTK L2-Egress																											
L2 Switchport (access / trunk)	L2 Switchport (access / trunk)																											
L2 Port-Channel	L2 Port-Channel																											
STP - RPVST	STP - RPVST																											
STP - MST	STP - MST																											
VPC Support	VPC Support																											
L3 Peer vPC	L3 Peer vPC																											
vPC Peer-Link	vPC Peer-Link																											
Member Ports and Both Endpoints Combinations	Member Ports and Both Endpoints Combinations																											
vPC Member Port	vPC Member Port																											
vPC - Min. NX-OS Release	vPC - Min. NX-OS Release																											
vPC Peer-Link	vPC Peer-Link																											
Member Ports and Both Endpoints Combinations	Member Ports and Both Endpoints Combinations																											
vPC Member Port	vPC Member Port																											
Storm Control	Storm Control																											
FabricPath - Min. NX-OS Release	FabricPath - Min. NX-OS Release																											
FabricPath Core Port	FabricPath Core Port																											
FabricPath Edge Port	FabricPath Edge Port																											
UDLD	UDLD																											
DHCP Snooping	DHCP Snooping																											
MPLS Features	MPLS Features																											
MPLS Support - Min. NX-OS Release	MPLS Support - Min. NX-OS Release																											
MPLS Support	MPLS Support																											
LDP	LDP																											
L3VPN	L3VPN																											
MVPN	MVPN																											
ECMP/S	ECMP/S																											
MPLS TE-FRR 50ms switchover time	MPLS TE-FRR 50ms switchover time																											
VPLS L3-Egress	VPLS L3-Egress																											
L3 Interface	L3 Interface																											
L3 Sub-Interface	L3 Sub-Interface																											
L3 Port-Channel	L3 Port-Channel																											
L3 Port-Channel Sub-Interface	L3 Port-Channel Sub-Interface																											
Unicast Routing Protocols IPv4 (EIGRP/RIP/OSPF/IS-IS/BGP)	Unicast Routing Protocols IPv4 (EIGRP/RIP/OSPF/IS-IS/BGP)																											
Unicast Routing Protocols IPv6 (OSPFv3/IS-ISv6/BGPv6)	Unicast Routing Protocols IPv6 (OSPFv3/IS-ISv6/BGPv6)																											
FHRP IPv4 (HSRP/VRRP/GLBP)	FHRP IPv4 (HSRP/VRRP/GLBP)																											
FHRP IPv6 (HSRPv6 / VRRPv3)	FHRP IPv6 (HSRPv6 / VRRPv3)																											
Note: VRRPv3 will be supported in Freetown	Note: VRRPv3 will be supported in Freetown																											
ECMP	ECMP																											
GRNSF	GRNSF																											
OTV Support	OTV Support																											
OTV - Join Interface	OTV - Join Interface																											
OTV - Internal Interface	OTV - Internal Interface																											
OTV - Min. NX-OS Release	OTV - Min. NX-OS Release																											
VXLAN - Min. NX-OS Release	VXLAN - Min. NX-OS Release																											
VXLAN - FAL/EVPN	VXLAN - FAL/EVPN																											
DFA	DFA																											
LISP	LISP																											
LISP Proxy Interface	LISP Proxy Interface																											
PBR	PBR																											
BFD	BFD																											
GRE Tunnel	GRE Tunnel																											
Unicast RPF	Unicast RPF																											
WCCP	WCCP																											
VRF Lite	VRF Lite																											
Proxy Layer-3 Forwarder / Replicator	Proxy Layer-3 Forwarder / Replicator																											
Reliable Forwarding	Reliable Forwarding																											
Multicast Support	Multicast Support																											
IGMP Snooping	IGMP Snooping																											
IGMP Support - Min. NX-OS Release	IGMP Support - Min. NX-OS Release																											
PIM SM	PIM SM																											

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	N7K-M140GS-11	N7K-M140GS-11L	N7K-M140GT-11	N7K-M140GT-11L	N7K-M1032Q-2L	N7K-M132XP-12	N7K-M132XP-2L	N7K-M220XP-23L	N7K-M208XP-23L	N7K-M202CF-22L	N7K-F132XP-16	N7K-F240XP-26	N7K-F240XP-26E	N7K-F240XT-26E	N7K-F240XP-23E	N7K-F340XP-26	N7K-F312XP-26	N7K-F300CK-26	N7K-F480XP-23	N7K-F324FX-26	N7K-F312CK-26	N7K-M340XP-23L	N7K-M324FX-23L	N7K-M340XP-23L	N7K-M324FX-23L	N7K-M312CX-26L	N7K-F430CX-36
PIM SSM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PIM Bi-Dir	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QoS Features	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IPv6 QoS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QoS Marking	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS	DSCP & COS
QoS Queuing	COS	COS	COS	COS	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP	COS + DSCP
QoS - Min. NX-OS Release	5.1(1)	5.1(1)	5.1(1)	5.1(2)	5.1(1)	5.1(1)	5.1(1)	6.1(1)	6.1(1)	6.1(1)	5.1(1)	6.1(1)	6.1(2)	6.1(2)	6.1(2)	6.1(2)	6.1(2)	6.1(2)	6.1(2)	6.1(2)	6.1(2)	6.1(2)	6.1(2)	6.1(2)	6.1(2)	6.1(2)	6.1(2)
QoS - SRR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QoS - tail drop congestion avoidance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QoS - WRED congestion avoidance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QoS - DSCP to QUEUE mapping (ingress)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QoS - DSCP to QUEUE mapping (egress)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QoS - policing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QoS - set discard_class or set qos_group	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QoS - per queue statistics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Security Features	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MAC Sec - Min. NX-OS Release	5.2(1)	5.2(1)	5.2(1)	5.2(1)	5.2(1)	5.2(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	5.2(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)	6.1(1)
AAA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MAC ACL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IPACL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
VACL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RACL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CTS - SGACL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CTS - 802.1AE (MACSec)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
802.1x	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PVLAN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Port-Security	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dynamic ARP Inspection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CoPP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rate-Limiter (pps to CPU)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FCoE Features	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FCoE Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FCoE VF Port (server attachment)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FCoE VE Port (FCF switch attachment)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Cisco Nexus 7000 I/O Module Comparison Matrix

	N7K-M140GS-11	N7K-M140GS-11L	N7K-M140G1-11	N7K-M140G1-11L	N7K-M1032Q-2L	N7K-M132XP-12	N7K-M132XP-12L	N7K-M224XP-23L	N7K-M224XP-23L	N7K-M222CF-22L	N7K-F132XP-15	N7K-F248XP-25	N7K-F248XP-25E	N7K-F248XT-25E	N7K-F248XP-23E	N7K-F348XP-25	N7K-F312PQ-25	N7K-F308CK-25	N7K-F48XP-23	N7K-F324FQ-25	N7K-F312CK-25	N7K-M348XP-23L	N7K-M324FQ-25L	N7K-M348XP-23L	N7K-M324FQ-25L	N7K-M312CQ-25L	N7K-M348CQ-35		
FCoE Support - Software Compatibility	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	FCoE Support - Software Compatibility
Priority Flow Control (PFC)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Priority Flow Control (PFC)
Emulated Management Features	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Emulated Management Features
Port-profile (inherit)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Port-profile (inherit)
IEEE 1588 PTP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	IEEE 1588 PTP
PONO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	PONO
SPAN Sessions	2 destination	2 destination	2 destination	2 destination	2 destination	2 destination	2 destination	2 destination + 12 perVDC	2 destination + 12 perVDC	2 destination + 12 perVDC	2 destination + 12 perVDC	2 destination + 11 perVDC	2 destination + 11 perVDC	2 destination + 11 perVDC	2 destination + 11 perVDC	16 destination	2 destination + 11 perVDC	2 destination + 11 perVDC	2 destination + 11 perVDC	16 destination	16 destination	16 destination	16 destination	16 destination	16 destination	16 destination	16 destination	16 destination	SPAN Sessions
SPAN Source	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SPAN Source
SPAN Destination	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SPAN Destination
ERSPAN Type 2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	ERSPAN Type 2
Source ERSPAN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Source ERSPAN
ERSPAN Type 2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	ERSPAN Type 2
Destination ERSPAN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Destination ERSPAN
ERSPAN Type 3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	ERSPAN Type 3
Source ERSPAN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Source ERSPAN
ERSPAN Type 3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	ERSPAN Type 3
Destination ERSPAN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Destination ERSPAN
SPAN - MTU Truncation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SPAN - MTU Truncation
SPAN - Rate Limit	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SPAN - Rate Limit
SPAN - Min. NX-OS Release	4.2(1)	4.2(1)	4.2(1)	5.1(2)	5.1(2)	4.2(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	5.1(1)	SPAN - Min. NX-OS Release	
NETFLOW (Full Netflow)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NETFLOW (Full Netflow)
NETFLOW (Sampled Netflow)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NETFLOW (Sampled Netflow)
L1 NETFLOW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L1 NETFLOW
L2 NETFLOW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	L2 NETFLOW
Bridged NETFLOW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Bridged NETFLOW
Ingress / Egress NETFLOW	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Ingress / Egress NETFLOW
Sub-Interface NETFLOW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Sub-Interface NETFLOW
ACL Capture	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	ACL Capture
Config Session	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Config Session
Config Checkpoint/Rollback	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Config Checkpoint/Rollback
SNMP v1/v2/v3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SNMP v1/v2/v3
XML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	XML
Wredmark	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Wredmark
IP SLA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	IP SLA
Serviceability Features	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Serviceability Features
VDC Ports Allocation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	VDC Ports Allocation
QoS Support - Min. NX-OS Release	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	QoS Support - Min. NX-OS Release
QoS Looack Test	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	QoS Looack Test
ISSU	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	ISSU
EEM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	EEM